

A PREDICTIVE INSTRUMENT FOR PROBABILITY OF TREATMENT AT PATIENTS WITH ASYMPTOMATIC EARLY-STAGE CHRONIC LYMPHOCYTIC LEUKEMIA-SINGLE CENTER EXPERIENCE

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Introduction: Early-stage patients with chronic lymphocytic leukemia (CLL) are diagnosed without need for treatment, managed with following. The distinct course of the disease is diverse, and planning treatment is barely projected at diagnosis. The aim of the study was first-time evaluation of International Prognostic Score to predict time to first treatment (TFT) in Macedonian patients with early stage CLL (International Prognostic Score for early-stage CLL IPS-E).

Material and methods: Retrospective study of asymptomatic patients with CLL at early stage of disease in a period of time from January 2012 to January 2022. The median follow-up was 60 months (1-120 months). Individual patient data from 120 treatment-naïve CLL patients with Binet A stage were analyzed to composed International Prognostic Score for Early-stage CLL and correlated with time to treatment failure (TTF). We presented IPS-E using three covariates: unmutated immunoglobulin heavy variable gene (IGHV), absolute lymphocyte count higher than $15 \times 10^9/L$, and presence of palpable lymph nodes. The IPS-E was the sum of the covariates (1 point each), and separated low-risk (score 0), intermediate-risk (score 1), and high-risk (score 2-3) patients showing a distinct TFT.

Results: Using IPS-E patients were distributed in three groups: low risk with 7, 5%, intermediate risk with 44, 1% and high risk patients 48, 3%. Average TFS was 29, 3 months for low-risk group; 28, 6 months for intermediate-risk group and 27; 1 months for high-risk group.

Conclusions: The IPS-E is a simple prognostic model that predicts the probability of treatment necessity in patients with early-stage CLL.

Key words: chronic lymphocytic leukemia, asymptomatic, early-stage, International Prognostic Score